Nuclear Instruments and Methods in Physics Research B29 (1987) 687–697
North-Holland, Amsterdam

AUTHOR INDEX

Abdel-Hady, A., see El-Nadi, M. B29 (1988) 680
Albury, D.M., see Thornton, J. B29 (1987) 515
Alderliesten, C., see Van der Borg, K. B29 (1987) 143
Alderliesten, C., see Klein Hofmeijer, G. B29 (1987) 166
Alderliesten, C., see Jansen, J.H.F. B29 (1987) 311
Alderliesten, C., see De Boer, P.L. B29 (1987) 322
Allen, P.T., see Guo, Z.Y. B29 (1987) 500
Allison, G.B., see Fifield, L.K. B29 (1987) 114
Anderliesten, C., see Troelstra, S.R. B29 (1987) 317
Anderson, L.W., see Swenson, D.R. B29 (1988) 627
Anthony, J.M. and D.J. Donahue, Accelerator mass spectrometry solutions to semiconductor problems B29 (1987) 77
Antoncik, E., Chemical trends in lattice location of implanted impurities in $A^{III}B^{V}$ compounds B29 (1987) 490
Arnold, J.R., Decay counting in the age of AMS B29 (1987) 424
Arnold, M., E. Bard, P. Maurice and J.C. Duplessy, ^{14}C dating with the Gif-sur-Yvette tandetron accelerator: status report B29 (1987) 120
Arnold, M., see Duplessy, J.-C. B29 (1987) 223
Arnold, M., see Bard, E. B29 (1987) 297
August, R.A., see King, S.E. B29 (1987) 14
Azzam, A., see Xiong, G.C. B29 (1988) 643
Azzi, C., see Campajola, L. B29 (1987) 129

Balsley, D.R., G.W. Farwell, P.M. Grootes and F.H. Schmidt, Ion source sample preparation techniques for carbon-14 AMS measurements B29 (1987) 37
Balsley, D.R., see Schmidt, F.H. B29 (1987) 97
Bard, E., see Arnold, M. B29 (1987) 120
Bard, E., see Duplessy, J.-C. B29 (1987) 223
Bard, E., M. Arnold, P. Maurice and J.-C. Duplessy, Measurements of bomb radiocarbon in the ocean by means of accelerator mass spectrometry: technical aspects B29 (1987) 297
Bastasz, R., see Eckstein, W. B29 (1988) 603
Beach, L.A., see King, S.E. B29 (1987) 14
Beer, J., see Hofmann, H.J. B29 (1987) 32
Beer, J., see Bonani, G. B29 (1987) 87
Beer, J., see Synal, H.A. B29 (1987) 146
Beer, J., G. Bonani, H.J. Hofmann, M. Suter, A. Synal, W. Wölfli, H. Oeschger, U. Siegenthaler and R.C. Finkel, ^{10}Be measurements on polar ice: comparison of arctic and antarctic records B29 (1987) 203
Beer, J., see Elmore, D. B29 (1987) 207
Beer, J., see Suter, M. B29 (1987) 211
Beer, J., see Eisenhauer, A. B29 (1987) 326
Beer, J., see Segl, M. B29 (1987) 332
Behar, M., see Weiser, M. B29 (1987) 587
Bentley, H.W., see Norris, A.E. B29 (1987) 376
Bertsche, K.J., P.G. Friedman, D.E. Morris, R.A. Muller and J.J. Welch, Status of the Berkeley Small Cyclotron AMS project B29 (1987) 105
Beukens, R.P., see Nadeau, M.-J. B29 (1987) 83
Biedermann, C., see Kroneberger, K. B29 (1988) 621
Bigeleisen, J., see Hemmick, T.K. B29 (1987) 389
Bird, J.R., see Fifield, L.K. B29 (1987) 114
Bizzarri, U., G. Messina, A. Mola, L. Picardi and A. Vignati, Increase of current from 35 to 120 mA of the 20 MeV Frascati microtron B29 (1987) 573
Boaretto, E., see Tuniz, C. B29 (1987) 133
Boerma, D.O., see Smulders, P.J.M. B29 (1987) 471
Boers, A.L., see Kuipers, E.W. B29 (1987) 567
Bonani, G., see Hofmann, H.J. B29 (1987) 32

0168-583X/87/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Bonani, G., J. Beer, H. Hofmann, H.-A. Synal, M. Suter, W. Wölfli, C. Pfleiderer, B. Kromer, C. Junghans and K.O. Münnich, Fractionation, precision and accuracy in ^{14}C and ^{13}C measurements B29 (1987) 87
Bonani, G., see Hofmann, H.J. B29 (1987) 100
Bonani, G., see Synal, H.A. B29 (1987) 146
Bonani, G., see Beer, J. B29 (1987) 203
Bonani, G., see Suter, M. B29 (1987) 211
Bonani, G., see Graf, T. B29 (1987) 262
Bonani, G., see Kromer, B. B29 (1987) 302
Bonani, G., see Eisenhauer, A. B29 (1987) 326
Bonani, G., see Segl, M. B29 (1987) 332
Bonetti, R., see Tuniz, C. B29 (1987) 133
Bonse, U., see Schneider, J.R. B29 (1988) 661
Bourlès, D., see Raisbeck, G.M. B29 (1987) 22
Brechtmann, C. and W. Heinrich, Measurements of elemental fragmentation cross section for relativistic heavy ions using CR39 plastic nuclear track detectors B29 (1988) 675
Bridwell, L.B., see Read, P.M. B29 (1987) 583
Brondi, A., see Campajola, L. B29 (1987) 129
Bronk, C.R. and R.E.M. Hedges, A gas ion source for radiocarbon dating B29 (1987) 45
Brown, T.A., D.E. Nelson, J.R. Southon and J.S. Vogel, ^{10}Be production rate variations as recorded in a mid-latitude lake sediment B29 (1987) 232
Burkhard, M., see Kroneberger, K. B29 (1988) 621
Bussmann, U., F.H.J. Meerbach and E.H. Te Kaat, Formation of β-Si_3N_4 during high temperature nitrogen implantation (*Letter to the Editor*) B29 (1987) 591

Calf, G.E., see Fifield, L.K. B29 (1987) 114
Campajola, L., A. Brondi, A. D'Onofrio, G. Gialanella, M. Romano, F. Terrasi, C. Tuniz, C. Azzi and S. Improta, The Italian AMS program: measurements with the Naples TTT-3 tandem accelerator B29 (1987) 129
Campajola, L., see Tuniz, C. B29 (1987) 133
Castaneda, C., see King, S.E. B29 (1987) 14
Chivas, A.R., see Fifield, L.K. B29 (1987) 114
Church, T.M., see Sharma, P. B29 (1987) 335
Ciampa, D., see Hemmick, T.K. B29 (1987) 389
Clark, E.A. et al., A computer controlled wide range three axis goniometer for Rutherford backscattering channeling experiments, Nucl. Instr. and Meth. B23 (1987) 395–398 (*Erratum*) B29 (1987) 593
Clouvas, A., see Kroneberger, K. B29 (1988) 621
Conard, N.J., see Elmore, D. B29 (1987) 207
Cooks, R.G. and O.W. Hand, Tandem mass spectrometry at low kinetic energy B29 (1987) 427
Corno, J., see Le Boité, M.G. B29 (1988) 653
Coursey, B.M., see Inn, K.G.W. B29 (1987) 27
Cowern, N.E.B., see Read, P.M. B29 (1987) 583
Cui Yungfeng, see Jiang Songsheng B29 (1987) 18
Currie, L.A., see Verkouteren, R.M. B29 (1987) 41
Currie, L.A., R.A. Fletcher and G.A. Klouda, On the identification of carbonaceous aerosols via ^{14}C accelerator mass spectrometry, and laser microprobe mass spectrometry B29 (1987) 346
Cutchin, J.H., see King, S.E. B29 (1987) 14

Dale, W.S.A., The shroud of Turin: relic or icon? B29 (1987) 187
Damon, P.E., see Donahue, D.J. B29 (1987) 169
Davis, S.N., see Fabryka-Martin, J. B29 (1987) 361
Davis, W.A., see Thonnard, N. B29 (1987) 398
De Boer, P.L., C.G. Langereis, J.D.A. Zijderveld, A.J.T. Romein, C. Porter, A.F.M. De Jong, C. Alderliesten and K. Van der Borg, Beryllium-10 data from redeposited Late Miocene pelagic sediments (East Java, Indonesia) B29 (1987) 322
De Haas, A.P., J.J. Langerak, C.J. Oskamp, H. De Vries and K. Van der Borg, Pulsed beam measurement system B29 (1987) 91
De Haas, A.P., see Langerak, J.J. B29 (1987) 94
De Jong, A.F.M., see Van der Borg, K. B29 (1987) 143
De Jong, A.F.M., see Klein Hofmeijer, G. B29 (1987) 166
De Jong, A.F.M., see Jansen, J.H.F. B29 (1987) 311
De Jong, A.F.M., see De Boer, P.L. B29 (1987) 322
De Jong, A.M.F., see Troelstra, S.R. B29 (1987) 317

De Vries, H., see De Haas, A.P. B29 (1987) 91
Deboffle, D., see Raisbeck, G.M. B29 (1987) 22
Doke, T., see Tawara, H. B29 (1987) 447
Doke, T., see Tawara, H. B29 (1987) 456
Donahue, D.J., see Verkouteren, R.M. B29 (1987) 41
Donahue, D.J., see Anthony, J.M. B29 (1987) 77
Donahue, D.J., A.J.T. Jull, T.W. Linick, A. Hatheway, L.J. Toolin, B. Gore and P.E. Damon, Some results from the Arizona TAMS facility: AMS ages of athletic, artistic, and animal artifacts B29 (1987) 169
D'Onofrio, A., see Campajola, L. B29 (1987) 129
Doucas, G., see Guo, Z.Y. B29 (1987) 500
Dragovitsch, P., see Korschinek, G. B29 (1987) 67
Drummond, D.D., see Purdy, C.B. B29 (1987) 372
Duplessy, J.C., see Arnold, M. B29 (1987) 120
Duplessy, J.-C., E. Bard, M. Arnold and P. Maurice, AMS ^{14}C-chronology of the deglacial warming of the North Atlantic Ocean B29 (1987) 223
Duplessy, J.-C., see Bard, E. B29 (1987) 297
Durrani, S.A., see Matiullah B29 (1987) 508
Dzhemilev, N.Kh., U.Kh. Rasulev and S.V. Verkhoturov, The fragmentation of sputtered cluster ions and their contribution to secondary ion mass-spectra B29 (1987) 531

Eckstein, W. and R. Bastasz, A simple representation for the angular dependence of scattered and recoil particle energies B29 (1988) 603
Eisenhauer, A., A. Mangini, M. Segl, J. Beer, G. Bonani, M. Suter and W. Wölfli, High resolution ^{10}Be and ^{230}Th profiles in DSDP Site 580 . . . . . B29 (1987) 326
El-Nadi, M. and A. Abdel-Hady, A noniterative method for fitting two overlapping Maxwellian distributions . . B29 (1988) 680
Elmore, D., see Kubik, P.W. B29 (1987) 138
Elmore, D., N.J. Conard, P.W. Kubik, H.E. Gove, M.Wahlen, J. Beer and M. Suter, ^{36}Cl and ^{10}Be profiles in Greenland ice: dating and production rate variations B29 (1987) 207
Elmore, D., see Leavy, B.D. B29 (1987) 246
Elmore, D., see Teng, R.T.D. B29 (1987) 281
Elmore, D., see Fabryka-Martin, J. B29 (1987) 361
Elmore, D., see Purdy, C.B. B29 (1987) 372
Elmore, D., see Norris, A.E. B29 (1987) 376
Elmore, D., see Fehn, U. B29 (1987) 380
Elmore, D., see Hemmick, T.K. B29 (1987) 389
England, J., Application of AMS dating to the paleogeography of the Canadian high arctic B29 (1987) 216
Englert, P., see Fink, D. B29 (1987) 275

Fabryka-Martin, J., S.N. Davis and D. Elmore, Applications of ^{129}I and ^{36}Cl in hydrology B29 (1987) 361
Fairbank Jr, W.M., Photon burst mass spectrometry B29 (1987) 407
Farwell, G.W., see Balsley, D.R. B29 (1987) 37
Fassett, J.D., see Inn, K.G.W. B29 (1987) 27
Fehn, U., see Kubik, P.W. B29 (1987) 138
Fehn, U., see Teng, R.T.D. B29 (1987) 281
Fehn, U., S. Tullai, R.T.D. Teng, D. Elmore and P.W. Kubik, Determination of ^{129}I in heavy residues of two crude oils B29 (1987) 380
Fehn, U., see Tullai, S. B29 (1987) 383
Fifield, L.K., T.R. Ophel, J.R. Bird, G.E. Calf, G.B. Allison and A.R. Chivas, The chlorine-36 measurement program at the Australian National University B29 (1987) 114
Fink, D., M. Paul, G. Hollos, S. Theis, S. Vogt, R. Stueck, P. Englert and R. Michel, Measurements of ^{41}Ca spallation cross sections and ^{41}Ca concentrations in the Grant meteorite by accelerator mass spectrometry . . B29 (1987) 275
Fink, D., see Paul, M. B29 (1987) 341
Fink, D., see Paul, M. B29 (1987) 393
Fink, D., see Weiser, M. B29 (1987) 587
Finkel, R.C., see Beer, J. B29 (1987) 203
Fioretto, E., see Tuniz, C. B29 (1987) 133
Fireman, E.L., A.E. Litherland and J.K. Rowley, Are AMS ^{7}Be measurements for a lithium solar neutrino detector practical? B29 (1987) 387
Fletcher, R.A., see Currie, L.A. B29 (1987) 346
Frech, G., see Weiser, M. B29 (1987) 587
Friedman, P.G., see Bertsche, K.J. B29 (1987) 105

Fujii, Y., see Hamaya, N. . . . B29 (1987) 537
Fujita, Y., see Itahashi, T. . . . B29 (1987) 151
Fukuda, T., see Itahashi, T. . . . B29 (1987) 151
Fusina, R. and J.C. Kimball, Resonant excitations of fast nuclei in crystals, Nucl. Instr. and Meth. B27 (1987) 368–373 (*Erratum*) . . . B29 (1987) 593

Ganssen, G.M., see Troelstra, S.R. . . . B29 (1987) 317
Gentile, T., see Hemmick, T.K. . . . B29 (1987) 389
Gerber, R., see Xiong, G.C. . . . B29 (1988) 643
Gialanella, G., see Campajola, L. . . . B29 (1987) 129
Gifford, S.K., see Norris, A.E. . . . B29 (1987) 376
Gillespie, R., Why date old bones? . . . B29 (1987) 164
Gladney, E., see Leavy, B.D. . . . B29 (1987) 246
Gonçalves, O.D., see Schneider, J.R. . . . B29 (1988) 661
Gore, B., see Donahue, D.J. . . . B29 (1987) 169
Gove, H.E., see Kubik, P.W. . . . B29 (1987) 138
Gove, H.E., Turin workshop on radiocarbon dating the Turin Shroud . . . B29 (1987) 193
Gove, H.E., see Elmore, D. . . . B29 (1987) 207
Gove, H.E., see Teng, R.T.D. . . . B29 (1987) 281
Gove, H.E., A.E. Litherland and K.H. Purser, Anno Decimo session . . . B29 (1987) 437
Graf, T., S. Vogt, G. Bonani, U. Herpers, P. Signer, M. Suter, R. Wieler and W. Wölfli, Depth dependence of ^{10}Be and ^{26}Al production rates in the iron meteorite Grant . . . B29 (1987) 262
Groeneveld, K.O., see Kroneberger, K. . . . B29 (1988) 621
Grootes, P.M., see Balsley, D.R. . . . B29 (1987) 37
Guo, Z.Y., P.T. Allen, G. Doucas and H.R.McK. Hyder, Thick target fast neutron yields . . . B29 (1987) 500

Haas, P., see Hemmick, T.K. . . . B29 (1987) 389
Hamaya, N., Y. Kuroiwa and Y. Fujii, A unique high pressure apparatus for X-ray diffraction studies of phase transitions up to 5 kbar . . . B29 (1987) 537
Hand, O.W., see Cooks, R.G. . . . B29 (1987) 427
Harper, R.E., see Thornton, J. . . . B29 (1987) 515
Hatheway, A., see Donahue, D.J. . . . B29 (1987) 169
Hedges, R.E.M., see Bronk, C.R. . . . B29 (1987) 45
Heil, O., see Kroneberger, K. . . . B29 (1988) 621
Heinemeier, J., P. Hornshøj, H.L. Nielsen, N. Rud and M.S. Thomsen, Accelerator mass spectrometry applied to ^{22,24}Na, ^{31,32}Si and ^{14}C . . . B29 (1987) 110
Heinrich, W., see Brechtmann, C. . . . B29 (1988) 675
Helz, G.R., see Purdy, C.B. . . . B29 (1987) 372
Hemmick, T., see Purdy, C.B. . . . B29 (1987) 372
Hemmick, T.K., see Kubik, P.W. . . . B29 (1987) 138
Hemmick, T.K., see Teng, R.T.D. . . . B29 (1987) 281
Hemmick, T.K., D. Elmore, P.W. Kubik, S.L. Olsen, T. Gentile, D. Nitz, D. Ciampa, H. Kagan, P. Haas, P.F. Smith, B.B. McInteer and J. Bigeleisen, A search for anomalously heavy isotopes of low Z nuclei . . . B29 (1987) 389
Henning, W., see Steinhof, A. . . . B29 (1987) 59
Herpers, U., see Graf, T. . . . B29 (1987) 262
Herzog, G.F., see Tuniz, C. . . . B29 (1987) 133
Hofmann, H., see Bonani, G. . . . B29 (1987) 87
Hofmann, H.J., J. Beer, G. Bonani, H.R. Von Gunten, S. Raman, M. Suter, R.L. Walker, W. Wölfli and D. Zimmermann, ^{10}Be: half-life and AMS-standards . . . B29 (1987) 32
Hofmann, H.J., G. Bonani, M. Suter and W. Wölfli, Charge state distributions and isotopic fractionation . . . B29 (1987) 100
Hofmann, H.J., see Synal, H.A. . . . B29 (1987) 146
Hofmann, H.J., see Beer, J. . . . B29 (1987) 203
Hofmann, H.J., see Suter, M. . . . B29 (1987) 211
Hollos, G., see Fink, D. . . . B29 (1987) 275
Hollos, G., see Paul, M. . . . B29 (1987) 341
Hollos, G., see Paul, M. . . . B29 (1987) 393
Honda, M., see Kobayashi, K. . . . B29 (1987) 173
Honda, M., see Nagai, H. . . . B29 (1987) 266
Horn, K.M. and W.A. Lanford, Observation of the bond-dependent Doppler broadening of the p(^{15}N, $\alpha\gamma$)^{12}C nuclear reaction . . . B29 (1988) 609
Hornshøj, P., see Heinemeier, J. . . . B29 (1987) 110

Houston, C.M., see Van der Borg, K. B29 (1987) 143
Hyder, H.R.McK., see Guo, Z.Y. B29 (1987) 500

Ibrahim, A.M., Analysis of grain growth due to ion irradiation of thin films B29 (1988) 650
Imamura, M., see Kobayashi, K. B29 (1987) 173
Imamura, M., see Nagai, H. B29 (1987) 266
Improta, S., see Campajola, L. B29 (1987) 129
Inn, K.G.W., S. Raman, B.M. Coursey, J.D. Fassett and R.L. Walker, Development of the NBS $^{10}Be/^{9}Be$ isotopic standard reference material B29 (1987) 27
Ishida, N., see Tawara, H. B29 (1987) 447
Itahashi, T., T. Fukuda, T. Shimoda, Y. Fujita, T. Yamagata and Y. Nagame, Mass spectrometry of ^{41}Ca with the RCNP AVF cyclotron B29 (1987) 151

Jamieson, D.N. and G.J.F. Legge, Aberrations of single magnetic quadrupole lenses B29 (1987) 544
Jamieson, D.N., see Sealock, R.M. B29 (1987) 557
Jansen, J.H.F., C. Alderliesten, A.J. Van Bennekom, K. Van der Borg and A.F.M. De Jong, Terrigenous supply of ^{10}Be and dating with ^{14}C and ^{10}Be in sediments of the Angola Basin (SE Atlantic) B29 (1987) 311
Jiang, S., see Kubik, P.W. B29 (1987) 138
Jiang Songsheng, Liu Yongfu, Cui Yungfeng, Wang Xun, Zhu Ban, Yan Xinshui and Qin Lianhua, Determination of ^{3}He with a tandetron accelerator at 0.8 MV B29 (1987) 18
Jull, A.J.T., see Verkouteren, R.M. B29 (1987) 41
Jull, A.J.T., see Donahue, D.J. B29 (1987) 169
Junghans, C., see Bonani, G. B29 (1987) 87

Kagan, H., see Hemmick, T.K. B29 (1987) 389
Kalbitzer, S., see Weiser, M. B29 (1987) 587
Kaufman, A., see Paul, M. B29 (1987) 341
Kemmler, J., see Kroneberger, K. B29 (1988) 621
Kieser, W.E., see Nadeau, M.-J. B29 (1987) 83
Kikuchi, J., see Tawara, H. B29 (1987) 447
Kikuchi, J., see Tawara, H. B29 (1987) 456
Kilius, L.R., M.-J. Nadeau, J.C. Rucklidge and A.E. Litherland, Isobar discrimination using the negative ion instability of hydrogen halides B29 (1987) 57
Kilius, L.R., J.C. Rucklidge and A.E. Litherland, Accelerator mass spectrometry of ^{129}I at IsoTrace B29 (1987) 72
Kimball, J.C., see Fusina, R. B29 (1987) 593
King, S.E., G.W. Phillips, R.A. August, L.A. Beach, J.H. Cutchin and C. Castaneda, Detection of tritium using accelerator mass spectrometry B29 (1987) 14
Klaver, G.Th., see Troelstra, S.R. B29 (1987) 317
Klein, J., see Schneider, R.J. B29 (1987) 271
Klein, J., see Sharma, P. B29 (1987) 335
Klein Hofmeijer, G., P.Y. Sondaar, C. Alderliesten, K. Van der Borg and A.F.M. De Jong, Indications of Pleistocene man on Sardinia B29 (1987) 166
Klouda, G.A., see Verkouteren, R.M. B29 (1987) 41
Klouda, G.A., see Currie, L.A. B29 (1987) 346
Kobayashi, K., K. Yoshida, M. Imamura, H. Nagai, H. Yoshikawa, H. Yamashita, S. Okizaki and M. Honda, ^{14}C dating of archaeological samples by AMS of Tokyo University B29 (1987) 173
Kobayashi, K., see Nagai, H. B29 (1987) 266
Kobayashi, T., see Nagai, H. B29 (1987) 266
Koehler, A.M., see Schneider, R.J. B29 (1987) 271
Korschinek, G., see Steinhof, A. B29 (1987) 59
Korschinek, G., H. Morinaga, E. Nolte, E. Preisenberger, U. Ratzinger, A. Urban, P. Dragovitsch and S. Vogt, Accelerator mass spectrometry with completely stripped ^{41}Ca and ^{53}Mn ions at the Munich tandem accelerator B29 (1987) 67
Koschar, P., see Kroneberger, K. B29 (1988) 621
Kromer, B., see Bonani, G. B29 (1987) 87
Kromer, B., C. Pfleiderer, P. Schlosser, I. Levin, K.O. Münnich, G. Bonani, M. Suter and W. Wölfli, AMS ^{14}C measurement of small volume oceanic water samples: experimental procedure and comparison with low-level counting technique B29 (1987) 302
Kroneberger, K., A. Clouvas, G. Schlüssler, P. Koschar, J. Kemmler, H. Rothard, C. Biedermann, O. Heil, M. Burkhard and K.O. Groeneveld, Secondary electron yields from the entrance and exit surfaces of thin carbon foils induced by penetration of H^+, H^0 and H_2^+ projectiles (1.2 MeV/u) B29 (1988) 621

Kronenburg, M., see Langerak, J.J. B29 (1987) 94
Ku, T.L., see Kusakabe, M. B29 (1987) 306
Kubik, P.W., D. Elmore, T.K. Hemmick, H.E. Gove, U. Fehn, R.T.D. Teng, S. Jiang and S. Tullai, Accelerator mass spectrometry at the University of Rochester B29 (1987) 138
Kubik, P.W., see Elmore, D. B29 (1987) 207
Kubik, P.W., see Leavy, B.D. B29 (1987) 246
Kubik, P.W., see Teng, R.T.D. B29 (1987) 281
Kubik, P.W., see Purdy, C.B. B29 (1987) 372
Kubik, P.W., see Fehn, U. B29 (1987) 380
Kubik, P.W., see Hemmick, T.K. B29 (1987) 389
Kuipers, E.W. and A.L. Boers, The quantum efficiency of a channeltron and a magnetic electron multiplier for 0.5–5 keV H atoms and ions B29 (1987) 567
Kuriyama, T., see Nakai, N. B29 (1987) 228
Kuroiwa, Y., see Hamaya, N. B29 (1987) 537
Kusakabe, M., T.L. Ku, J.R. Southon, J.S. Vogel, D.E. Nelson, C.I. Measures and Y. Nozaki, The distribution of ^{10}Be and ^{9}Be in ocean water B29 (1987) 306
Kutschera, W., see Paul, M. B29 (1987) 341

Lal, D., Cosmogenic nuclides produced in situ in terrestrial solids B29 (1987) 238
Lanford, W.A., see Horn, K.M. B29 (1988) 609
Langerak, J.J., see De Haas, A.P. B29 (1987) 91
Langerak, J.J., A.P. De Haas, M. Kronenburg, W. Smit, B. Verhelst and K. Van der Borg, Automation of AMS measurements in Utrecht B29 (1987) 94
Langereis, C.G., see De Boer, P.L. B29 (1987) 322
Langley, R.A., M. Lewis and R.A. Zuhr, Elastic scattering of protons by beryllium B29 (1988) 599
Lauer, J., see Schneider, J.R. B29 (1988) 661
Le Boité, M.G., A. Traverse, L. Névot, B. Pardo and J. Corno, Grazing X-ray reflectometry and Rutherford backscattering: two complementary techniques for the study of thin film mixing B29 (1988) 653
Leach, D.D., see Schmidt, F.H. B29 (1987) 97
Leavy, B.D., F.M. Phillips, D. Elmore, P.W. Kubik and E. Gladney, Measurement of cosmogenic ^{36}Cl/Cl in young volcanic rocks: an application of accelerator mass spectrometry in geochronology B29 (1987) 246
Legge, G.J.F., see Jamieson, D.N. B29 (1987) 544
Legge, G.J.F., see Sealock, R.M. B29 (1987) 557
Lehmann, B.E., see Thonnard, N. B29 (1987) 398
Lestringuez, J., see Raisbeck, G.M. B29 (1987) 22
Levin, I., see Kromer, B. B29 (1987) 302
Lewis, M., see Langley, R.A. B29 (1988) 599
Linick, T.W., see Verkouteren, R.M. B29 (1987) 41
Linick, T.W., see Donahue, D.J. B29 (1987) 169
Litherland, A.E., see Kilius, L.R. B29 (1987) 57
Litherland, A.E., see Kilius, L.R. B29 (1987) 72
Litherland, A.E., see Nadeau, M.-J. B29 (1987) 83
Litherland, A.E., see Fireman, E.L. B29 (1987) 387
Litherland, A.E., see Gove, H.E. B29 (1987) 437
Liu Yongfu, see Jiang Songsheng B29 (1987) 18
Lowe, D.C., see Wallace, G. B29 (1987) 124
Lowe, D.C., G. Wallace and R.J. Sparks, Applications of AMS in the atmospheric and oceanographic sciences . B29 (1987) 291

Magaritz, M., see Paul, M. B29 (1987) 341
Mangini, A., see Eisenhauer, A. B29 (1987) 326
Mangini, A., see Segl, M. B29 (1987) 332
Martin, P.S., Late Quaternary extinctions: the promise of TAMS ^{14}C dating B29 (1987) 179
Matiullah and S.A. Durrani, Chemical and electrochemical registration of protons in CR-39 – implications for neutron dosimetry B29 (1987) 508
Maurice, P., see Arnold, M. B29 (1987) 120
Maurice, P., see Duplessy, J.-C. B29 (1987) 223
Maurice, P., see Bard, E. B29 (1987) 297
McInteer, B.B., see Hemmick, T.K. B29 (1987) 389
Measures, C., see Segl, M. B29 (1987) 332
Measures, C.I., see Kusakabe, M. B29 (1987) 306
Meerbach, F.H.J., see Bussmann, U. B29 (1987) 591

Messina, G., see Bizzarri, U. B29 (1987) 573
Meyer, O., see Xiong, G.C. B29 (1988) 643
Michel, D., see Suter, M. B29 (1987) 211
Michel, R., see Fink, D. B29 (1987) 275
Middleton, R., see Sharma, P. B29 (1987) 63
Middleton, R., see Schneider, R.J. B29 (1987) 271
Middleton, R., see Sharma, P. B29 (1987) 335
Mignerey, A.C., see Purdy, C.B. B29 (1987) 372
Miranda, J., see Oliver, A. B29 (1987) 521
Mola, A., see Bizzarri, U. B29 (1987) 573
Møller, P.J. (*Book review*: Modern techniques of surface science, by D.P. Woodruff and T.A. Delchar) B29 (1988) 683
Morinaga, H., see Korschinek, G. B29 (1987) 67
Morris, D.E., see Bertsche, K.J. B29 (1987) 105
Müller, M., see Steinhof, A. B29 (1987) 59
Muller, R.A., see Bertsche, K.J. B29 (1987) 105
Münnich, K.O., see Bonani, G. B29 (1987) 87
Münnich, K.O., see Kromer, B. B29 (1987) 302

Nadeau, M.-J., see Kilius, L.R. B29 (1987) 57
Nadeau, M.-J., W.E. Kieser, R.P. Beukens and A.E. Litherland, Quantum mechanical effects on sputter source isotope fractionation B29 (1987) 83
Nagai, H., see Kobayashi, K. B29 (1987) 173
Nagai, H., T. Kobayashi, M. Honda, M. Imamura, K. Kobayashi, K. Yoshida and H. Yamashita, Measurements of ^{10}Be and ^{26}Al in some meteorites with internal beam monitor method B29 (1987) 266
Nagame, Y., see Itahashi, T. B29 (1987) 151
Nakai, N., S. Ohishi, T. Kuriyama and T. Nakamura, Application of ^{14}C-dating to sedimentary geology and climatology: sea-level and climate change during the Holocene B29 (1987) 228
Nakai, N., see Nakamura, T. B29 (1987) 355
Nakamura, T., see Nakai, N. B29 (1987) 228
Nakamura, T., N. Nakai and S. Ohishi, Applications of environmental ^{14}C measured by AMS as a carbon tracer B29 (1987) 355
Nelson, D.E., see Vogel, J.S. B29 (1987) 50
Nelson, D.E., see Brown, T.A. B29 (1987) 232
Nelson, D.E., see Kusakabe, M. B29 (1987) 306
Névot, L., see Le Boité, M.G. B29 (1988) 653
Nielsen, H.L., see Heinemeier, J. B29 (1987) 110
Nitz, D., see Hemmick, T.K. B29 (1987) 389
Nolte, E., see Steinhof, A. B29 (1987) 59
Nolte, E., see Korschinek, G. B29 (1987) 67
Nörregaard, J. (*Book review*: Gallium arsenide and related compounds 1986, edited by W.T. Lindley) B29 (1987) 594
Norris, A.E., K. Wolfsberg, S.K. Gifford, H.W. Bentley and D. Elmore, Infiltration at Yucca Mountain, Nevada, traced by ^{36}Cl B29 (1987) 376
Nozaki, Y., see Kusakabe, M. B29 (1987) 306

Oberschachtsiek, P., see Weiser, M. B29 (1987) 587
Oeschger, H., Accelerator mass spectrometry and ice core research B29 (1987) 196
Oeschger, H., see Beer, J. B29 (1987) 203
Oeschger, H., see Suter, M. B29 (1987) 211
Ohishi, S., see Nakai, N. B29 (1987) 228
Ohishi, S., see Nakamura, T. B29 (1987) 355
Okizaki, S., see Kobayashi, K. B29 (1987) 173
Oliver, A. and J. Miranda, A comparison between PIXE and RBS film thickness measurements in binary targets B29 (1987) 521
Olsen, S.L., see Hemmick, T.K. B29 (1987) 389
Ophel, T.R., see Fifield, L.K. B29 (1987) 114
Oskamp, C.J., see De Haas, A.P. B29 (1987) 91
Ostlund, H.G., Radiocarbon in dissolved oceanic CO_2 . . . . . B29 (1987) 286

Pardo, B., see Le Boité, M.G. B29 (1988) 653
Paul, M., see Steinhof, A. B29 (1987) 59
Paul, M., see Fink, D. B29 (1987) 275

Paul, M., D. Fink, G. Hollos, A. Kaufman, W. Kutschera and M. Magaritz, Measurement of ^{129}I concentrations in the environment after the Chernobyl reactor accident B29 (1987) 341
Paul, M., D. Fink and G. Hollos, Recoil accelerator mass spectrometry of nuclear reaction products B29 (1987) 393
Pfleiderer, C., see Bonani, G. B29 (1987) 87
Pfleiderer, C., see Kromer, B. B29 (1987) 302
Phillips, F.M., see Leavy, B.D. B29 (1987) 246
Phillips, G.W., see King, S.E. B29 (1987) 14
Picardi, L., see Bizzarri, U. B29 (1987) 573
Pohl, K.P., see Wallace, G. B29 (1987) 124
Polach, H.A., Perspectives in radiocarbon dating by radiometry B29 (1987) 415
Porter, C., see De Boer, P.L. B29 (1987) 322
Preisenberger, E., see Korschinek, G. B29 (1987) 67
Purdy, C.B., A.C. Mignerey, G.R. Helz, D.D. Drummond, P.W. Kubik, D. Elmore and T. Hemmick, ^{36}Cl: a tracer in groundwater in the aqua formation of Southern Maryland B29 (1987) 372
Purser, K.H., see Gove, H.E. B29 (1987) 437

Qin Lianhua, see Jiang Songsheng B29 (1987) 18

Raisbeck, G.M., F. Yiou, D. Bourlès, J. Lestringuez and D. Deboffle, Measurements of ^{10}Be and ^{26}Al with a tandetron AMS facility B29 (1987) 22
Raman, S., see Inn, K.G.W. B29 (1987) 27
Raman, S., see Hofmann, H.J. B29 (1987) 32
Rasulev, U.Kh., see Dzhemilev, N.Kh. B29 (1987) 531
Ratzinger, U., see Korschinek, G. B29 (1987) 67
Read, P.M., C.J. Sofield, N.E.B. Cowern and L.B. Bridwell, Stopping powers for energetic ions in carbon targets (*Letter to the Editor*) B29 (1987) 583
Reedy, R.C., Predicting the production rates of cosmogenic nuclides in extraterrestrial matter B29 (1987) 251
Rickards, J. and E.P. Zironi, Multilayer PIXE analysis B29 (1987) 527
Roeckl, E., see Steinhof, A. B29 (1987) 59
Rollason, A.J., see Schneider, J.R. B29 (1988) 661
Romano, M., see Campajola, L. B29 (1987) 129
Romein, A.J.T., see De Boer, P.L. B29 (1987) 322
Rothard, H., see Kroneberger, K. B29 (1988) 621
Rowley, J.K., see Fireman, E.L. B29 (1987) 387
Rucklidge, J.C., see Kilius, L.R. B29 (1987) 57
Rucklidge, J.C., see Kilius, L.R. B29 (1987) 72
Rud, N., see Heinemeier, J. B29 (1987) 110
Rudello, P., see Tuniz, C. B29 (1987) 133

Sartori, S., see Tuniz, C. B29 (1987) 133
Schlosser, P., see Kromer, B. B29 (1987) 302
Schlüssler, G., see Kroneberger, K. B29 (1988) 621
Schmidt, F.H., see Balsley, D.R. B29 (1987) 37
Schmidt, F.H., D.R. Balsley and D.D. Leach, Early expectations of AMS: greater ages and tiny fractions. One failure? – One success B29 (1987) 97
Schneider, J.R., O.D. Gonçalves, A.J. Rollason, U. Bonse, J. Lauer and W. Zulehner, Annealed Czochralski grown silicon crystals: a new material for the monochromatisation of synchrotron radiation and X-rays above 60 keV B29 (1988) 661
Schneider, R.J., J.M. Sisterson, A.M. Koehler, J. Klein and R. Middleton, Measurement of cross sections for aluminum-26 and sodium-24 induced by protons in aluminum B29 (1987) 271
Schüll, D., see Steinhof, A. B29 (1987) 59
Sealock, R.M., D.N. Jamieson and G.J.F. Legge, Scanning transmission microscopy with a 2 MeV alpha particle microbeam B29 (1987) 557
Segl, M., see Eisenhauer, A. B29 (1987) 326
Segl, M., A. Mangini, J. Beer, G. Bonani, M. Suter, W. Wölfli and C. Measures, ^{10}Be in the Atlantic Ocean, a transect at 25° N B29 (1987) 332
Sellschop, J.P.F., Progress in accelerator mass spectrometry B29 (1987) 439
Sennema, E.J., see Troelstra, S.R. B29 (1987) 317
Sharma, P. and R. Middleton, Sample preparation and production of negative ions of calcium hydride for ^{41}Ca AMS B29 (1987) 63
Sharma, P., J. Klein, R. Middleton and T.M. Church, ^{26}Al and ^{10}Be authigenic marine minerals B29 (1987) 335

Shimoda, T., see Itahashi, T. B29 (1987) 151
Siegenthaler, U., see Beer, J. B29 (1987) 203
Signer, P., see Graf, T. B29 (1987) 262
Singh, R.C. and H.S. Virk, Internal heating effect during electrochemical etching of Lexan polycarbonate B29 (1987) 579
Sisterson, J.M., see Schneider, R.J. B29 (1987) 271
Smit, W., see Langerak, J.J. B29 (1987) 94
Smith, P.F., see Hemmick, T.K. B29 (1987) 389
Smulders, P.J.M. and D.O. Boerma, Computer simulation of channeling in single crystals B29 (1987) 471
Sofield, C.J., see Read, P.M. B29 (1987) 583
Sondaar, P.Y., see Klein Hofmeijer, G. B29 (1987) 166
Southon, J.R., see Vogel, J.S. B29 (1987) 50
Southon, J.R., see Brown, T.A. B29 (1987) 232
Southon, J.R., see Kusakabe, M. B29 (1987) 306
Sparks, R.J., see Wallace, G. B29 (1987) 124
Sparks, R.J., see Lowe, D.C. B29 (1987) 291
Spolaore, P., see Tuniz, C. B29 (1987) 133
Steinhof, A., W. Henning, M. Müller, E. Roeckl, D. Schüll, G. Korschinek, E. Nolte and M. Paul, Accelerator mass spectrometry of ^{41}Ca with a positive-ion source and the UNILAC accelerator B29 (1987) 59
Stensgaard, R. (*Book review*: Radiation alarms and access control systems, NCRP Report No. 88) B29 (1987) 594
Stievano, B.M., see Tuniz, C. B29 (1987) 133
Stueck, R., see Fink, D. B29 (1987) 275
Suter, M., see Hofmann, H.J. B29 (1987) 32
Suter, M., see Bonani, G. B29 (1987) 87
Suter, M., see Hofmann, H.J. B29 (1987) 100
Suter, M., see Synal, H.A. B29 (1987) 146
Suter, M., see Beer, J. B29 (1987) 203
Suter, M., see Elmore, D. B29 (1987) 207
Suter, M., J. Beer, G. Bonani, H.J. Hofmann, D. Michel, H. Oeschger, H.A. Synal and W. Wölfli, ^{36}Cl studies at the ETH/SIN-AMS facility B29 (1987) 211
Suter, M., see Graf, T. B29 (1987) 262
Suter, M., see Kromer, B. B29 (1987) 302
Suter, M., see Eisenhauer, A. B29 (1987) 326
Suter, M., see Segl, M. B29 (1987) 332
Swenson, D.R. and L.W. Anderson, Relaxation rates for optically pumped Na vapor on silicone surfaces B29 (1988) 627
Synal, A., see Beer, J. B29 (1987) 203
Synal, H.-A., see Bonani, G. B29 (1987) 87
Synal, H.A., J. Beer, G. Bonani, H.J. Hofmann, M. Suter and W. Wölfli, Detection of ^{32}Si and ^{36}Cl with the ETH/SIN EN-tandem B29 (1987) 146
Synal, H.A., see Suter, M. B29 (1987) 211

Takeuchi, W., see Yamamura, Y. B29 (1987) 461
Tawara, H., N. Ishida, J. Kikuchi and T. Doke, Measurements of the *W* values in argon, nitrogen, and methane for 0.93 to 5.3 MeV alpha particles B29 (1987) 447
Tawara, H., J. Kikuchi and T. Doke, Energy dependences of *W* values for MeV alpha particles in Ar–Xe, Ar–N_2, and Ar–CH_4 mixtures B29 (1987) 456
Taylor, R.E., AMS ^{14}C dating of critical bone samples: proposed protocol and criteria for evaluation B29 (1987) 159
Te Kaat, E.H., see Bussmann, U. B29 (1987) 591
Teng, R.T.D., see Kubik, P.W. B29 (1987) 138
Teng, R.T.D., U. Fehn, D. Elmore, T.K. Hemmick, P.W. Kubik and H.E. Gove, Determination of Os isotopes and Re/Os ratios using AMS B29 (1987) 281
Teng, R.T.D., see Fehn, U. B29 (1987) 380
Terrasi, F., see Campajola, L. B29 (1987) 129
Theis, S., see Fink, D. B29 (1987) 275
Thomsen, M.S., see Heinemeier, J. B29 (1987) 110
Thonnard, N., R.D. Willis, M.C. Wright, W.A. Davis and B.E. Lehmann, Resonance ionization spectroscopy and the detection of ^{81}Kr B29 (1987) 398
Thornton, J., R.E. Harper and D.M. Albury, Helium microprobe analysis of nickel silicide diodes B29 (1987) 515
Toolin, L.J., see Donahue, D.J. B29 (1987) 169
Traverse, A., see Le Boité, M.G. B29 (1988) 653
Troelstra, S.R., G.M. Ganssen, E.J. Sennema, G.Th. Klaver, C. Anderliesten, K. Van der Borg and A.M.F. De Jong, Late Quaternary stratigraphy and sedimentology of the Central North Atlantic: a progress report B29 (1987) 317

Tubbs, L.E., see Tullai, S. B29 (1987) 383
Tullai, S., see Kubik, P.W. B29 (1987) 138
Tullai, S., see Fehn, U. B29 (1987) 380
Tullai, S., L.E. Tubbs and U. Fehn, Iodine extraction from petroleum for analysis of $^{129}I/^{127}I$ ratios by AMS . . B29 (1987) 383
Tuniz, C., see Campajola, L. B29 (1987) 129
Tuniz, C., P. Rudello, B.M. Stievano, P. Spolaore, E. Boaretto, R. Bonetti, E. Fioretto, L. Campajola, S. Sartori, V. Vanzani and G.F. Herzog, The Italian AMS program: measurements with the XTU tandem B29 (1987) 133

Urban, A., see Korschinek, G. B29 (1987) 67

Van Bennekom; A.J., see Jansen, J.H.F. B29 (1987) 311
Van der Borg, K., see De Haas, A.P. B29 (1987) 91
Van der Borg, K., see Langerak, J.J. B29 (1987) 94
Van der Borg, K., C. Alderliesten, C.M. Houston, A.F.M. De Jong and N.A. Van Zwol, Accelerator mass spectrometry with ^{14}C and ^{10}Be in Utrecht B29 (1987) 143
Van der Borg, K., see Klein Hofmeijer, G. B29 (1987) 166
Van der Borg, K., see Jansen, J.H.F. B29 (1987) 311
Van der Borg, K., see Troelstra, S.R. B29 (1987) 317
Van der Borg, K., see De Boer, P.L. B29 (1987) 322
Van Zwol, N.A., see Van der Borg, K. B29 (1987) 143
Vanzani, V., see Tuniz, C. B29 (1987) 133
Verhelst, B., see Langerak, J.J. B29 (1987) 94
Verkhoturov, S.V., see Dzhemilev, N.Kh. B29 (1987) 531
Verkouteren, R.M., G.A. Klouda, L.A. Currie, D.J. Donahue, A.J.T. Jull and T.W. Linick, Preparation of microgram samples on iron wool for radiocarbon analysis via accelerator mass spectrometry: a closed-system approach B29 (1987) 41
Vignati, A., see Bizzarri, U. B29 (1987) 573
Virk, H.S., see Singh, R.C. B29 (1987) 579
Vogel, J.S., J.R. Southon and D.E. Nelson, Catalyst and binder effects in the use of filamentous graphite for AMS B29 (1987) 50
Vogel, J.S., see Brown, T.A. B29 (1987) 232
Vogel, J.S., see Kusakabe, M. B29 (1987) 306
Vogt, S., see Korschinek, G. B29 (1987) 67
Vogt, S., see Graf, T. B29 (1987) 262
Vogt, S., see Fink, D. B29 (1987) 275
Von Gunten, H.R., see Hofmann, H.J. B29 (1987) 32

Wahlen, M., see Elmore, D. B29 (1987) 207
Walker, R.L., see Inn, K.G.W. B29 (1987) 27
Walker, R.L., see Hofmann, H.J. B29 (1987) 32
Wallace, G., R.J. Sparks, D.C. Lowe and K.P. Pohl, The New Zealand accelerator mass spectrometry facility . . B29 (1987) 124
Wallace, G., see Lowe, D.C. B29 (1987) 291
Wang Xun, see Jiang Songsheng B29 (1987) 18
Weiser, M., M. Behar, S. Kalbitzer, P. Oberschachtsiek, D. Fink and G. Frech, A four-moments analysis of ^{1}H range profiles in Si (*Letter to the Editor*) B29 (1987) 587
Welch, J.J., see Bertsche, K.J. B29 (1987) 105
Wendorf, F., The advantages of AMS to field archaeologists B29 (1987) 155
Wieler, R., see Graf, T. B29 (1987) 262
Willis, R.D., see Thonnard, N. B29 (1987) 398
Wölfli, W., Advances in accelerator mass spectrometry B29 (1987) 1
Wölfli, W., see Hofmann, H.J. B29 (1987) 32
Wölfli, W., see Bonani, G. B29 (1987) 87
Wölfli, W., see Hofmann, H.J. B29 (1987) 100
Wölfli, W., see Synal, H.A. B29 (1987) 146
Wölfli, W., see Beer, J. B29 (1987) 203
Wölfli, W., see Suter, M. B29 (1987) 211
Wölfli, W., see Graf, T. B29 (1987) 262
Wölfli, W., see Kromer, B. B29 (1987) 302
Wölfli, W., see Eisenhauer, A. B29 (1987) 326
Wölfli, W., see Segl, M. B29 (1987) 332
Wolfsberg, K., see Norris, A.E. B29 (1987) 376

Wright, M.C., see Thonnard, N. B29 (1987) 398

Xiong, G.C., A. Azzam, R. Gerber and O. Meyer, Lattice site occupation of compound forming elements implanted into aluminium B29 (1988) 643

Yamagata, T., see Itahashi, T. B29 (1987) 151
Yamamura, Y. and W. Takeuchi, Monocrystal sputtering by the computer simulation code ACOCT B29 (1987) 461
Yamashita, H., see Kobayashi, K. B29 (1987) 173
Yamashita, H., see Nagai, H. B29 (1987) 266
Yan Xinshui, see Jiang Songsheng B29 (1987) 18
Yiou, F., see Raisbeck, G.M. B29 (1987) 22
Yoshida, K., see Kobayashi, K. B29 (1987) 173
Yoshida, K., see Nagai, H. B29 (1987) 266
Yoshikawa, H., see Kobayashi, K. B29 (1987) 173

Zhu Ban, see Jiang Songsheng B29 (1987) 18
Zijderveld, J.D.A., see De Boer, P.L. B29 (1987) 322
Zimmermann, D., see Hofmann, H.J. B29 (1987) 32
Zironi, E.P., see Rickards, J. B29 (1987) 527
Zuhr, R.A., see Langley, R.A. B29 (1988) 599
Zulehner, W., see Schneider, J.R. B29 (1988) 661

Nuclear Instruments and Methods in Physics Research B29 (1987) 698–702
North-Holland, Amsterdam

SUBJECT INDEX

Basic data for materials modification and analysis

Measurements of the W values in argon, nitrogen, and methane for 0.93 to 5.3 MeV alpha particles , Tawara, H., N. Ishida, J. Kikuchi and T. Doke B29 (1987) 447
Energy dependences of W values for MeV alpha particles in Ar–Xe, Ar–N_2, and Ar–CH_4 mixtures, Tawara, H., J. Kikuchi and T. Doke B29 (1987) 456
Stopping powers for energetic ions in carbon targets (*Letter to the Editor*), Read, P.M., C.J. Sofield, N.E.B. Cowern and L.B. Bridwell B29 (1987) 583
Elastic scattering of protons by beryllium, Langley, R.A., M. Lewis and R.A. Zuhr B29 (1988) 599
A simple representation for the angular dependence of scattered and recoil particle energies, Eckstein, W. and R. Bastasz B29 (1988) 603

Atomic collisions in solids

Monocrystal sputtering by the computer simulation code ACOCT, Yamamura, Y. and W. Takeuchi B29 (1987) 461
Computer simulation of channeling in single crystals, Smulders, P.J.M. and D.O. Boerma B29 (1987) 471
A four-moments analysis of ^1H range profiles in Si (*Letter to the Editor*), Weiser, M., M. Behar, S. Kalbitzer, P. Oberschachtsiek, D. Fink and G. Frech B29 (1987) 587
Observation of the bond-dependent Doppler broadening of the p(^{15}N, $\alpha\gamma$)^{12}C nuclear reaction, Horn, K.M. and W.A. Lanford B29 (1988) 609
Secondary electron yields from the entrance and exit surfaces of thin carbon foils induced by penetration of H^+, H^0 and H_2^+ projectiles (1.2 MeV/u), Kroneberger, K., A. Clouvas, G. Schlüssler, P. Koschar, J. Kemmler, H. Rothard, C. Biedermann, O. Heil, M. Burkhard and K.O. Groeneveld B29 (1988) 621
Relaxation rates for optically pumped Na vapor on silicone surfaces, Swenson, D.R. and L.W. Anderson B29 (1988) 627

Ion beam modification of materials

Chemical trends in lattice location of implanted impurities in $A^{III}B^{V}$ compounds, Antoncik, E. B29 (1987) 490
Formation of β-Si_3N_4 during high temperature nitrogen implantation (*Letter to the Editor*), Bussmann, U., F.H.J. Meerbach and E.H. Te Kaat B29 (1987) 591
Lattice site occupation of compound forming elements implanted into aluminium, Xiong, G.C., A. Azzam, R. Gerber and O. Meyer B29 (1988) 643
Analysis of grain growth due to ion irradiation of thin films, Ibrahim, A.M. B29 (1988) 650

Effects of radiation

Thick target fast neutron yields, Guo, Z.Y., P.T. Allen, G. Doucas and H.R.McK. Hyder B29 (1987) 500
Chemical and electrochemical registration of protons in CR-39 – implications for neutron dosimetry, Matiullah and S.A. Durrani B29 (1987) 508

Analysis of materials

Proceedings of the Fourth International Symposium on Accelerator Mass Spectrometry (Niagara-on-the-Lake, Ontario, Canada, April 27–30, 1987)

Section I. Advances in AMS techniques

Advances in accelerator mass spectrometry, Wölfli, W. B29 (1987) 1
Detection of tritium using accelerator mass spectrometry, King, S.E., G.W. Phillips, R.A. August, L.A. Beach, J.H. Cutchin and C. Castaneda B29 (1987) 14
Determination of ^3He with a tandetron accelerator at 0.8 MV, Jiang Songsheng, Liu Yongfu, Cui Yungfeng, Wang Xun, Zhu Ban, Yan Xinshui and Qin Lianhua B29 (1987) 18

0168-583X/87/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Measurements of ^{10}Be and ^{26}Al with a tandetron AMS facility, Raisbeck, G.M., F. Yiou, D. Bourlès, J. Lestringuez and D. Deboffle B29 (1987) 22
Development of the NBS ^{10}Be/^{9}Be isotopic standard reference material, Inn, K.G.W., S. Raman, B.M. Coursey, J.D. Fassett and R.L. Walker B29 (1987) 27
^{10}Be: half-life and AMS-standards, Hofmann, H.J., J. Beer, G. Bonani, H.R. Von Gunten, S. Raman, M. Suter, R.L. Walker, W. Wölfli and D. Zimmermann B29 (1987) 32
Ion source sample preparation techniques for carbon-14 AMS measurements, Balsley, D.R., G.W. Farwell, P.M. Grootes and F.H. Schmidt B29 (1987) 37
Preparation of microgram samples on iron wool for radiocarbon analysis via accelerator mass spectrometry: a closed-system approach, Verkouteren, R.M., G.A. Klouda, L.A. Currie, D.J. Donahue, A.J.T. Jull and T.W. Linick B29 (1987) 41
A gas ion source for radiocarbon dating, Bronk, C.R. and R.E.M. Hedges B29 (1987) 45
Catalyst and binder effects in the use of filamentous graphite for AMS, Vogel, J.S., J.R. Southon and D.E. Nelson B29 (1987) 50
Isobar discrimination using the negative ion instability of hydrogen halides, Kilius, L.R., M.-J. Nadeau, J.C. Rucklidge and A.E. Litherland B29 (1987) 57
Accelerator mass spectrometry of ^{41}Ca with a positive-ion source and the UNILAC accelerator, Steinhof, A., W. Henning, M. Müller, E. Roeckl, D. Schüll, G. Korschinek, E. Nolte and M. Paul B29 (1987) 59
Sample preparation and production of negative ions of calcium hydride for ^{41}Ca AMS, Sharma, P. and R. Middleton B29 (1987) 63
Accelerator mass spectrometry with completely stripped ^{41}Ca and ^{53}Mn ions at the Munich tandem accelerator, Korschinek, G., H. Morinaga, E. Nolte, E. Preisenberger, U. Ratzinger, A. Urban, P. Dragovitsch and S. Vogt B29 (1987) 67
Accelerator mass spectrometry of ^{129}I at IsoTrace, Kilius, L.R., J.C. Rucklidge and A.E. Litherland B29 (1987) 72
Accelerator mass spectrometry solutions to semiconductor problems, Anthony, J.M. and D.J. Donahue B29 (1987) 77
Quantum mechanical effects on sputter source isotope fractionation, Nadeau, M.-J., W.E. Kieser, R.P. Beukens and A.E. Litherland B29 (1987) 83
Fractionation, precision and accuracy in ^{14}C and ^{13}C measurements, Bonani, G., J. Beer, H. Hofmann, H.-A. Synal, M. Suter, W. Wölfli, C. Pfleiderer, B. Kromer, C. Junghans and K.O. Münnich B29 (1987) 87
Pulsed beam measurement system, De Haas, A.P., J.J. Langerak, C.J. Oskamp, H. De Vries and K. Van der Borg B29 (1987) 91
Automation of AMS measurements in Utrecht, Langerak, J.J., A.P. De Haas, M. Kronenburg, W. Smit, B. Verhelst and K. Van der Borg B29 (1987) 94
Early expectations of AMS: greater ages and tiny fractions. One failure? – One success, Schmidt, F.H., D.R. Balsley and D.D. Leach B29 (1987) 97
Charge state distributions and isotopic fractionation, Hofmann, H.J., G. Bonani, M. Suter and W. Wölfli B29 (1987) 100
Status of the Berkeley Small Cyclotron AMS project, Bertsche, K.J., P.G. Friedman, D.E. Morris, R.A. Muller and J.J. Welch B29 (1987) 105

Section II. Facility reports

Accelerator mass spectrometry applied to ^{22,24}Na, ^{31,32}Si and ^{14}C, Heinemeier, J., P. Hornshøj, H.L. Nielsen, N. Rud and M.S. Thomsen B29 (1987) 110
The chlorine-36 measurement program at the Australian National University, Fifield, L.K., T.R. Ophel, J.R. Bird, G.E. Calf, G.B. Allison and A.R. Chivas B29 (1987) 114
^{14}C dating with the Gif-sur-Yvette tandetron accelerator: status report, Arnold, M., E. Bard, P. Maurice and J.C. Duplessy B29 (1987) 120
The New Zealand accelerator mass spectrometry facility, Wallace, G., R.J. Sparks, D.C. Lowe and K.P. Pohl . . B29 (1987) 124
The Italian AMS program: measurements with the Naples TTT-3 tandem accelerator, Campajola, L., A. Brondi, A. D'Onofrio, G. Gialanella, M. Romano, F. Terrasi, C. Tuniz, C. Azzi and S. Improta B29 (1987) 129
The Italian AMS program: measurements with the XTU tandem, Tuniz, C., P. Rudello, B.M. Stievano, P. Spolaore, E. Boaretto, R. Bonetti, E. Fioretto, L. Campajola, S. Sartori, V. Vanzani and G.F. Herzog B29 (1987) 133
Accelerator mass spectrometry at the University of Rochester, Kubik, P.W., D. Elmore, T.K. Hemmick, H.E. Gove, U. Fehn, R.T.D. Teng, S. Jiang and S. Tullai B29 (1987) 138
Accelerator mass spectrometry with ^{14}C and ^{10}Be in Utrecht, Van der Borg, K., C. Alderliesten, C.M. Houston, A.F.M. De Jong and N.A. Van Zwol B29 (1987) 143
Detection of ^{32}Si and ^{36}Cl with the ETH/SIN EN-tandem, Synal, H.A., J. Beer, G. Bonani, H.J. Hofmann, M. Suter and W. Wölfli B29 (1987) 146
Mass spectrometry of ^{41}Ca with the RCNP AVF cyclotron, Itahashi, T., T. Fukuda, T. Shimoda, Y. Fujita, T. Yamagata and Y. Nagame B29 (1987) 151

Section III. Applications

III(a). Archaeology and ecology

The advantages of AMS to field archaeologists, Wendorf, F. B29 (1987) 155
AMS ^{14}C dating of critical bone samples: proposed protocol and criteria for evaluation, Taylor, R.E. B29 (1987) 159
Why date old bones?, Gillespie, R. B29 (1987) 164
Indications of Pleistocene man on Sardinia, Klein Hofmeijer, G., P.Y. Sondaar, C. Alderliesten, K. Van der Borg and A.F.M. De Jong B29 (1987) 166
Some results from the Arizona TAMS facility: AMS ages of athletic, artistic, and animal artifacts, Donahue, D.J., A.J.T. Jull, T.W. Linick, A. Hatheway, L.J. Toolin, B. Gore and P.E. Damon B29 (1987) 169
^{14}C dating of archaeological samples by AMS of Tokyo University, Kobayashi, K., K. Yoshida, M. Imamura, H. Nagai, H. Yoshikawa, H. Yamashita, S. Okizaki and M. Honda B29 (1987) 173
Late Quaternary extinctions: the promise of TAMS ^{14}C dating, Martin, P.S. B29 (1987) 179
The shroud of Turin: relic or icon?, Dale, W.S.A. B29 (1987) 187
Turin workshop on radiocarbon dating the Turin Shroud, Gove, H.E. B29 (1987) 193

III(b). Glaciology and climatology

Accelerator mass spectrometry and ice core research, Oeschger, H. B29 (1987) 196
^{10}Be measurements on polar ice: comparison of arctic and antarctic records, Beer, J., G. Bonani, H.J. Hofmann, M. Suter, A. Synal, W. Wölfli, H. Oeschger, U. Siegenthaler and R.C. Finkel B29 (1987) 203
^{36}Cl and ^{10}Be profiles in Greenland ice: dating and production rate variations, Elmore, D., N.J. Conard, P.W. Kubik, H.E. Gove, M.Wahlen, J. Beer and M. Suter B29 (1987) 207
^{36}Cl studies at the ETH/SIN-AMS facility, Suter, M., J. Beer, G. Bonani, H.J. Hofmann, D. Michel, H. Oeschger, H.A. Synal and W. Wölfli B29 (1987) 211
Application of AMS dating to the paleogeography of the Canadian high arctic, England, J. B29 (1987) 216
AMS ^{14}C-chronology of the deglacial warming of the North Atlantic Ocean, Duplessy, J.-C., E. Bard, M. Arnold and P. Maurice B29 (1987) 223
Application of ^{14}C-dating to sedimentary geology and climatology: sea-level and climate change during the Holocene, Nakai, N., S. Ohishi, T. Kuriyama and T. Nakamura B29 (1987) 228
^{10}Be production rate variations as recorded in a mid-latitude lake sediment, Brown, T.A., D.E. Nelson, J.R. Southon and J.S. Vogel B29 (1987) 232

III(c). Cosmochemistry and in situ production

Cosmogenic nuclides produced in situ in terrestrial solids, Lal, D. B29 (1987) 238
Measurement of cosmogenic $^{36}Cl/Cl$ in young volcanic rocks: an application of accelerator mass spectrometry in geochronology, Leavy, B.D., F.M. Phillips, D. Elmore, P.W. Kubik and E. Gladney B29 (1987) 246
Predicting the production rates of cosmogenic nuclides in extraterrestrial matter, Reedy, R.C. B29 (1987) 251
Depth dependence of ^{10}Be and ^{26}Al production rates in the iron meteorite Grant, Graf, T., S. Vogt, G. Bonani, U. Herpers, P. Signer, M. Suter, R. Wieler and W. Wölfli B29 (1987) 262
Measurements of ^{10}Be and ^{26}Al in some meteorites with internal beam monitor method, Nagai, H., T. Kobayashi, M. Honda, M. Imamura, K. Kobayashi, K. Yoshida and H. Yamashita B29 (1987) 266
Measurement of cross sections for aluminum-26 and sodium-24 induced by protons in aluminum, Schneider, R.J., J.M. Sisterson, A.M. Koehler, J. Klein and R. Middleton B29 (1987) 271
Measurements of ^{41}Ca spallation cross sections and ^{41}Ca concentrations in the Grant meteorite by accelerator mass spectrometry, Fink, D., M. Paul, G. Hollos, S. Theis, S. Vogt, R. Stueck, P. Englert and R. Michel B29 (1987) 275
Determination of Os isotopes and Re/Os ratios using AMS, Teng, R.T.D., U. Fehn, D. Elmore, T.K. Hemmick, P.W. Kubik and H.E. Gove B29 (1987) 281

III(d). Ocean and atmospheric sciences

Radiocarbon in dissolved oceanic CO_2, Ostlund, H.G. B29 (1987) 286
Applications of AMS in the atmospheric and oceanographic sciences, Lowe, D.C., G. Wallace and R.J. Sparks . B29 (1987) 291
Measurements of bomb radiocarbon in the ocean by means of accelerator mass spectrometry: technical aspects, Bard, E., M. Arnold, P. Maurice and J.-C. Duplessy B29 (1987) 297
AMS ^{14}C measurement of small volume oceanic water samples: experimental procedure and comparison with low-level counting technique, Kromer, B., C. Pfleiderer, P. Schlosser, I. Levin, K.O. Münnich, G. Bonani, M. Suter and W. Wölfli B29 (1987) 302
The distribution of ^{10}Be and ^{9}Be in ocean water, Kusakabe, M., T.L. Ku, J.R. Southon, J.S. Vogel, D.E. Nelson, C.I. Measures and Y. Nozaki B29 (1987) 306
Terrigenous supply of ^{10}Be and dating with ^{14}C and ^{10}Be in sediments of the Angola Basin (SE Atlantic), Jansen, J.H.F., C. Alderliesten, A.J. Van Bennekom, K. Van der Borg and A.F.M. De Jong B29 (1987) 311

Late Quaternary stratigraphy and sedimentology of the Central North Atlantic: a progress report, Troelstra, S.R., G.M. Ganssen, E.J. Sennema, G.Th. Klaver, C. Anderliesten, K. Van der Borg and A.M.F. De Jong .. B29 (1987) 317
Beryllium-10 data from redeposited Late Miocene pelagic sediments (East Java, Indonesia), De Boer, P.L., C.G. Langereis, J.D.A. Zijderveld, A.J.T. Romein, C. Porter, A.F.M. De Jong, C. Alderliesten and K. Van der Borg B29 (1987) 322
High resolution ^{10}Be and ^{230}Th profiles in DSDP Site 580, Eisenhauer, A., A. Mangini, M. Segl, J. Beer, G. Bonani, M. Suter and W. Wölfli B29 (1987) 326
^{10}Be in the Atlantic Ocean, a transect at 25° N, Segl, M., A. Mangini, J. Beer, G. Bonani, M. Suter, W. Wölfli and C. Measures B29 (1987) 332
^{26}Al and ^{10}Be authigenic marine minerals, Sharma, P., J. Klein, R. Middleton and T.M. Church B29 (1987) 335
Measurement of ^{129}I concentrations in the environment after the Chernobyl reactor accident, Paul, M., D. Fink, G. Hollos, A. Kaufman, W. Kutschera and M. Magaritz B29 (1987) 341
On the identification of carbonaceous aerosols via ^{14}C accelerator mass spectrometry, and laser microprobe mass spectrometry, Currie, L.A., R.A. Fletcher and G.A. Klouda B29 (1987) 346
Applications of environmental ^{14}C measured by AMS as a carbon tracer, Nakamura, T., N. Nakai and S. Ohishi B29 (1987) 355

III(e). Hydrology and geology

Applications of ^{129}I and ^{36}Cl in hydrology, Fabryka-Martin, J., S.N. Davis and D. Elmore B29 (1987) 361
^{36}Cl: a tracer in groundwater in the aqua formation of Southern Maryland, Purdy, C.B., A.C. Mignerey, G.R. Helz, D.D. Drummond, P.W. Kubik, D. Elmore and T. Hemmick B29 (1987) 372
Infiltration at Yucca Mountain, Nevada, traced by ^{36}Cl, Norris, A.E., K. Wolfsberg, S.K. Gifford, H.W. Bentley and D. Elmore B29 (1987) 376
Determination of ^{129}I in heavy residues of two crude oils, Fehn, U., S. Tullai, R.T.D. Teng, D. Elmore and P.W. Kubik B29 (1987) 380
Iodine extraction from petroleum for analysis of ^{129}I/^{127}I ratios by AMS, Tullai, S., L.E. Tubbs and U. Fehn .. B29 (1987) 383

III(f). Astrophysics, nuclear physics and lasers

Are AMS ^{7}Be measurements for a lithium solar neutrino detector practical?, Fireman, E.L., A.E. Litherland and J.K. Rowley B29 (1987) 387
A search for anomalously heavy isotopes of low Z nuclei, Hemmick, T.K., D. Elmore, P.W. Kubik, S.L. Olsen, T. Gentile, D. Nitz, D. Ciampa, H. Kagan, P. Haas, P.F. Smith, B.B. McInteer and J. Bigeleisen B29 (1987) 389
Recoil accelerator mass spectrometry of nuclear reaction products, Paul, M., D. Fink and G. Hollos B29 (1987) 393
Resonance ionization spectroscopy and the detection of ^{81}Kr, Thonnard, N., R.D. Willis, M.C. Wright, W.A. Davis and B.E. Lehmann B29 (1987) 398
Photon burst mass spectrometry, Fairbank Jr, W.M. B29 (1987) 407

Section IV. Anno Decimo

Perspectives in radiocarbon dating by radiometry, Polach, H.A. B29 (1987) 415
Decay counting in the age of AMS, Arnold, J.R. B29 (1987) 424
Tandem mass spectrometry at low kinetic energy, Cooks, R.G. and O.W. Hand B29 (1987) 427
Anno Decimo session, Gove, H.E., A.E. Litherland and K.H. Purser B29 (1987) 437

Conference summary

Progress in accelerator mass spectrometry, Sellschop, J.P.F. B29 (1987) 439

Helium microprobe analysis of nickel silicide diodes, Thornton, J., R.E. Harper and D.M. Albury B29 (1987) 515
A comparison between PIXE and RBS film thickness measurements in binary targets, Oliver, A. and J. Miranda B29 (1987) 521
Multilayer PIXE analysis, Rickards, J. and E.P. Zironi B29 (1987) 527
The fragmentation of sputtered cluster ions and their contribution to secondary ion mass-spectra, Dzhemilev, N.Kh., U.Kh. Rasulev and S.V. Verkhoturov B29 (1987) 531
Grazing X-ray reflectometry and Rutherford backscattering: two complementary techniques for the study of thin film mixing, Le Boité, M.G., A. Traverse, L. Névot, B. Pardo and J. Corno B29 (1988) 653
Annealed Czochralski grown silicon crystals: a new material for the monochromatisation of synchrotron radiation and X-rays above 60 keV, Schneider, J.R., O.D. Gonçalves, A.J. Rollason, U. Bonse, J. Lauer and W. Zulehner B29 (1988) 661

Experimental methods and equipment

A unique high pressure apparatus for X-ray diffraction studies of phase transitions up to 5 kbar, Hamaya, N., Y. Kuroiwa and Y. Fujii B29 (1987) 537

Aberrations of single magnetic quadrupole lenses, Jamieson, D.N. and G.J.F. Legge B29 (1987) 544
Scanning transmission microscopy with a 2 MeV alpha particle microbeam, Sealock, R.M., D.N. Jamieson and G.J.F. Legge B29 (1987) 557
The quantum efficiency of a channeltron and a magnetic electron multiplier for 0.5–5 keV H atoms and ions, Kuipers, E.W. and A.L. Boers B29 (1987) 567
Increase of current from 35 to 120 mA of the 20 MeV Frascati microtron, Bizzarri, U., G. Messina, A. Mola, L. Picardi and A. Vignati B29 (1987) 573
Internal heating effect during electrochemical etching of Lexan polycarbonate, Singh, R.C. and H.S. Virk B29 (1987) 579
Measurements of elemental fragmentation cross section for relativistic heavy ions using CR39 plastic nuclear track detectors, Brechtmann, C. and W. Heinrich B29 (1988) 675
A noniterative method for fitting two overlapping Maxwellian distributions, El-Nadi, M. and A. Abdel-Hady . . B29 (1988) 680

Letters to the editor

Stopping powers for energetic ions in carbon targets, Read, P.M., C.J. Sofield, N.E.B. Cowern and L.B. Bridwell B29 (1987) 583
A four-moments analysis of ^{1}H range profiles in Si, Weiser, M., M. Behar, S. Kalbitzer, P. Oberschachtsiek, D. Fink and G. Frech B29 (1987) 587
Formation of β-Si_3N_4 during high temperature nitrogen implantation, Bussmann, U., F.H.J. Meerbach and E.H. Te Kaat B29 (1987) 591

Errata

E.A. Clark et al, A computer controlled wide range three axis goniometer for Rutherford backscattering channeling experiments, Nucl. Instr. and Meth. B23 (1987) 395–398 . . . . . B29 (1987) 593
R. Fusina and J.C. Kimball, Resonant excitations of fast nuclei in crystals, Nucl. Instr. and Meth. B27 (1987) 368–373 . . . . . B29 (1987) 593

Book reviews

J. Nörregaard, Gallium arsenide and related compounds 1986, edited by W.T. Lindley B29 (1987) 594
R. Stensgaard, Radiation alarms and access control systems, NCRP Report No. 88 . . . . . B29 (1987) 594
P.J. Møller, Modern techniques of surface science, by D.P. Woodruff and T.A. Delchar B29 (1988) 683